

1. Record Nr.	UNINA9910457501403321
Autore	Perkowitz S
Titolo	Slow light [[electronic resource]] : invisibility, teleportation and other mysteries of light / / Sidney Perkowitz
Pubbl/distr/stampa	London, : Imperial College Press, 2011
ISBN	1-283-43323-0 9786613433237 1-84816-753-9
Descrizione fisica	1 online resource (156 p.)
Disciplina	535
Soggetti	Light - Speed Light - Transmission Quantum optics Photons Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Introduction; Chapter 1 What is Light? The Mystery Continues; Chapter 2 Why is Light so Fast?; Chapter 3 Can Anything Go Even Faster?; Chapter 4 Slow, Stopped, Fast, and Backwards Light; Chapter 5 Extreme and Entangled Light; Chapter 6 Invisibility; Chapter 7 Light Fantasy to Light Reality; Faster than Light Travel; Faster than Light Communication; Slow, Stopped, Fast, Backwards, and Left-Handed Light; Quantum Information Technology with Light; Laser Fusion; Invisibility; Epilogue; Acknowledgements; Further Reading, Surfing, and Viewing Chapter 1 What is Light? The Mystery ContinuesBackground and popular treatments; Chapter 2 Why is Light so Fast?; Background and popular treatments; For readers who want more detail; Chapter 3 Can Anything Go Even Faster?; Background and popular treatments; Fictional treatments; For readers who want more detail; Chapter 4 Slow, Stopped, Fast, and Backwards Light; Background and popular treatments; Fictional treatments; For readers who want more detail; Chapter 5 Extreme and Entangled Light; Background and popular

treatments; Fictional treatments; For readers who want more detail Chapter 6 InvisibilityBackground and popular treatments; Fictional treatments; For readers who want more detail; Chapter 7 Light Fantasy to Light Reality; Background and popular treatments; For readers who want more detail; Index

Sommario/riassunto

Slow Light is a popular treatment of today's astonishing breakthroughs in the science of light. Even though we don't understand light's quantum mysteries, we can slow it to a stop and speed it up beyond its Einsteinian speed limit, 186,000 miles/sec; use it for quantum telecommunications; teleport it; manipulate it to create invisibility; and perhaps generate hydrogen fusion power with it. All this is lucidly presented for non-scientists who wonder about teleportation, Harry Potter invisibility cloaks, and other fantastic outcomes. Slow Light shows how the real science and the fantasy inspire